

**WHAT IS CLAIMED IS:**

1-10 (Canceled)

11. (New) A device for detecting arterial pressure with high measurement precision, comprising a cuff with inflatable chamber, adapted to be placed around the arm of a patient, means for introducing air to inflate said cuff, and decompression means adapted to decompress said inflatable chamber, further comprising means adapted to detect and store all the sphygmie pulses generated by the arterial pulsation and to identify the pulses that correspond to appearance and disappearance of wrist beat, detected by means of a technique for detecting sphygmie pulses generated by arterial pressure that provides for the intervention and subjective judgment of an operator.

12. (New) The device of claim 11, wherein said decompression means of said inflatable chamber comprise a valve for providing constant and time-controlled decompression.

13. (New) The device of claim 11, comprising discharge means adapted to completely and instantaneously discharge the inflatable chamber of said cuff.

14. (New) The device of claim 11, wherein said means for detecting and storing the sphygmie pulses are connected to data storage means, which are adapted to store the chart of the sphygmie pulses.

15. (New) The device of claim 11, comprising a display that is adapted to display detected levels of pressure and levels of sphygmie intensity of the pulsations.

16. (New) The device of claim 11, comprising a button that is adapted to be pressed by the operator when the operator detects sphygmie pulses that correspond to systolic or diastolic pressure.

17. (New) A method for detecting arterial pressure, comprising the steps of:

pumping air into a cuff provided with an inflatable chamber;  
decompressing said inflatable chamber;

detecting, by means of the intervention and subjective judgment of an operator, the sphygmie pulses that correspond respectively to the appearance and disappearance of the wrist beat,

further comprising the steps of:

5        detecting and storing all the sphygmie pulses generated by arterial pulsation by using an electronic sensing and storage circuit;

identifying, among said sphygmie pulses, the ones that correspond to the appearance and disappearance of the pulse beat, detected by means of said stethoscope.

10        18. (New) The method of claim 17, wherein said step of performing the decompression of said inflatable chamber comprises performing decompression at a controlled and constant rate.

15        19. (New) The method of claim 17, further comprising a step of storing said sphygmie pulses generated by arterial pulsation, in order to allow subsequent analysis of the chart of sphygmie pulses, in order to determine assuredly the pulses that actually correspond to the maximum and minimum values of arterial pressure.

20        20. (New) The method of claim 17, comprising a step of pressing, on the part of said operator, a button when sphygmie pulses that correspond to systolic and diastolic pressure are detected, said sphygmie pulses that correspond to systolic and diastolic pressure being "marked" on a digital scale of said device.